

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the above-referenced application.

Listing of Claims:

1. **(Currently amended)** A protein of the following as defined in (a) or (b):
 - (a) a protein comprising an the amino acid sequence of SEQ ID NO: 2; and
 - (b) a protein comprising an the amino acid sequence of SEQ ID NO: 2 with one or several amino acids deleted, replaced, or added, and having an activity of binding rabconnectin-3 and a GDP/GTP exchange protein.
2. **(Currently amended)** A The protein according to of claim 1, which has the amino acid sequence of SEQ ID NO: 2.
3. **(Currently amended)** A polynucleotide for encoding that encodes the a protein as defined in claim 1 or 2.
4. **(Currently amended)** A The polynucleotide according to of claim 3, comprising a ~~nucleotide sequence of nucleotide numbers 1 to 4470 of a~~ the nucleotide sequence of SEQ ID NO: 1.
5. **(Currently amended)** A polynucleotide of the following as defined in (a) or (b):
 - (a) a polynucleotide comprising a ~~nucleotide sequence of nucleotide numbers 1 to 4470 of a~~ the nucleotide sequence of SEQ ID NO: 1; and
 - (b) a polynucleotide which hybridizes with the a polynucleotide comprising a nucleotide sequence that is complementary to the ~~nucleotide sequence of nucleotide numbers 1 to 4470 of the~~ nucleotide sequence of SEQ ID NO: 1 under a stringent condition, and encodes a protein having an activity of binding rabconnectin-3 and a GDP/GTP exchange protein.

6. **(Currently amended)** A polynucleotide of ~~the following as defined in (a) or (b):~~ (a) a polynucleotide comprising ~~a nucleotide sequence of nucleotide numbers 1 to 4470 of a~~ the nucleotide sequence of SEQ ID NO: 1; and (b) a polynucleotide comprising a nucleotide sequence whose homology to the nucleotide sequence ~~of nucleotide numbers 1 to 4470 of the nucleotide sequence of SEQ ID NO:~~ 1 is 80% or higher and encoding a protein having an activity of binding rabconnectin-3 and a GDP/GTP exchange protein.

7. **(Currently amended)** A recombinant vector comprising ~~the a~~ a polynucleotide as defined in any one of ~~claim~~ claims 3 to 6.

8. **(Currently amended)** A transformant obtained by transforming a host with ~~the a~~ polynucleotide as defined in any one of ~~claim~~ claims 3 to 6.

9. **(Currently amended)** A method of producing a protein having an activity of binding rabconnectin-3 and a GDP/GTP exchange protein, comprising:
culturing ~~the a~~ transformant as defined in claim 8 in a culture; and
collecting, from ~~a~~ the culture, ~~the a~~ protein having ~~the an~~ activity of binding ~~the~~ rabconnectin-3 and the GDP/GTP exchange protein, ~~expressed by the transformant~~.

10. **(Canceled)**

11. **(Currently amended)** A method of analyzing ~~the a~~ first polynucleotide as defined in any one of claims 3 to 6, comprising hybridizing a probe or a primer with the first polynucleotide, wherein the probe or primer includes including a second polynucleotide having at least 15 nucleotides complementary to the first polynucleotide ~~as defined in any one of claim 3 to 6 with a subject~~ polynucleotide.

12. **(Currently amended)** ~~An~~ The analyzing method according to of claim 11, wherein the subject first polynucleotide is present in a subject tissue or a subject cell.

13. **(Currently amended)** A method of analyzing a gene first polynucleotide encoding the a protein as defined in claim 1 or 2, comprising hybridizing a probe or a primer with the first polynucleotide, wherein the probe or primer includes including a second polynucleotide having at least 15 nucleotides complementary to the first polynucleotide as defined in any one of claim 3 to 6 with a subject polynucleotide.

14. **(Currently amended)** A The analyzing method of analyzing a gene according to claim 12 13, wherein the subject first polynucleotide is present in a subject tissue or a subject cell.

15. **(Currently amended)** A method of analyzing a gene, comprising the steps of: amplifying an mRNA in a subject tissue or a subject cell by an RT-PCR method with a primer that includes including a polynucleotide having at least 15 nucleotides complementary to the a polynucleotide as defined in any one of claims 3 to 6, and measuring the polynucleotide as defined in any one of claim 3 to 6.

16. **(Currently amended)** An antisense polynucleotide which hybridizes with an mRNA encoding the a protein as defined in claim 1 or 2.

17. **(Currently amended)** A ribozyme for cutting an mRNA encoding the a protein as defined in claim 1 or 2.

18. **(Currently amended)** A double-stranded RNA for cutting an mRNA encoding the a protein as defined in claim 1 or 2 by RNA interference.

19. **(Currently amended)** An antibody against the a protein as defined in claim 1 or 2.

20. **(Currently amended)** A method of immunohistologically analyzing the a protein as defined in claim 1 or 2, comprising contacting the protein which uses the with an antibody as defined in claim 19.

21. (Currently amended) ~~An~~ The analyzing method according to of claim 20, further comprising wherein the analyzing method comprises analyzing localization determining the location of a the protein.

22. (Currently amended) ~~An~~ The analysis method according to of claim 20, further comprising wherein the analyzing method comprises analyzing determining the ~~an~~ amount of expression of a the protein.

23. (Currently amended) A method of screening a candidate ~~for~~ a material that promotes or inhibits ~~of~~ a material for promoting or inhibiting binding between a ~~rabconnectin-3~~ binding protein which is the protein as defined in claim 1 or 2 or a heterogenous heterogeneous homologous protein thereof, and a ~~rabconnectine-3~~ rabconnectin-3, comprising the steps of:
reacting contacting the a protein as defined in claim 1 or 2 or a heterogeneous homologous protein thereof ~~rabconnectin-3~~ binding protein with the rabconnectin-3 in the presence and absence of the candidate material materials, and
selecting the a candidate material which increases or decreases the binding between the protein and rabconnectin-3.

24. (Currently amended) A method of screening a candidate ~~for~~ a material that promotes or inhibits ~~of~~ a material for promoting or inhibiting binding between a ~~Rab~~ GDP/GTP exchange protein binding protein which is the protein as defined in claim 1 or 2 or a heterogenous heterogeneous homologous protein thereof, and a Rab 3 GDP/GTP exchange protein, comprising the steps of:
reacting contacting the a protein as defined in claim 1 or 2 or a heterogeneous homologous protein thereof ~~Rab3~~ GDP/GTP exchange protein binding protein with the Rab3 GDP/GTP exchange protein in the presence and absence of the candidate material materials, and
selecting the a candidate material which increases or decreases the binding between the protein and Rab3 GDP/GTP exchange protein.

25. (New) A polynucleotide that encodes a protein as defined in claim 2.

26. **(New)** A recombinant vector comprising a polynucleotide as defined in claim 25.
27. **(New)** A transformant obtained by transforming a host with a polynucleotide as defined in claim 25.
28. **(New)** A method of producing a protein having an activity of binding rabconnectin-3 and a GDP/GTP exchange protein, comprising:
 - culturing a transformant as defined in claim 27 in a culture; and
 - collecting, from the culture, a protein having an activity of binding rabconnectin-3 and the GDP/GTP exchange protein.
29. **(New)** A method of analyzing a first polynucleotide as defined in claim 25, comprising hybridizing a probe or a primer with the first polynucleotide, wherein the probe or primer includes a second polynucleotide having at least 15 nucleotides complementary to the first polynucleotide.
30. **(New)** The analyzing method of claim 11, wherein the first polynucleotide is present in a tissue or a cell.
31. **(New)** A method comprising amplifying an mRNA in a tissue or a cell by an RT-PCR method with a primer that includes a polynucleotide having at least 15 nucleotides complementary to a polynucleotide as defined in claim 25.